



Response to Toxic Stress:

Supporting resilience in young children and their caregivers to promote long-term health and improved learning outcomes

November 13, 2020

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Introductions

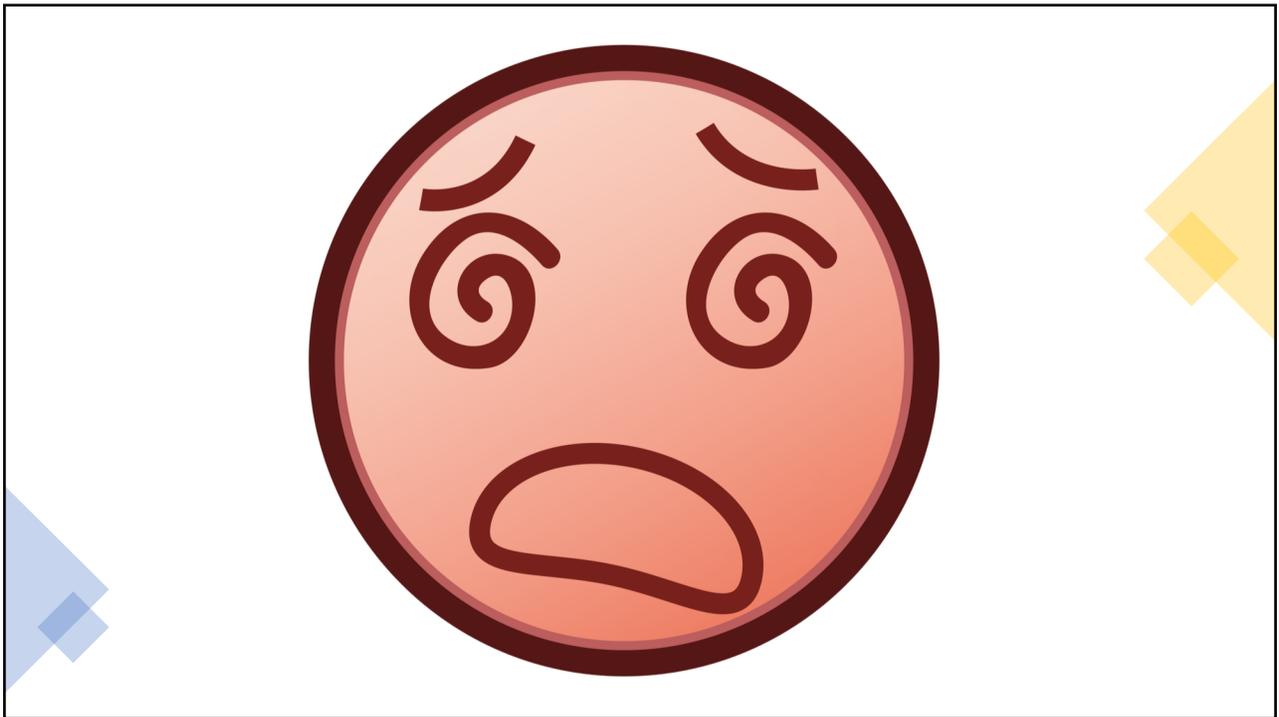


Nicole Jacobson

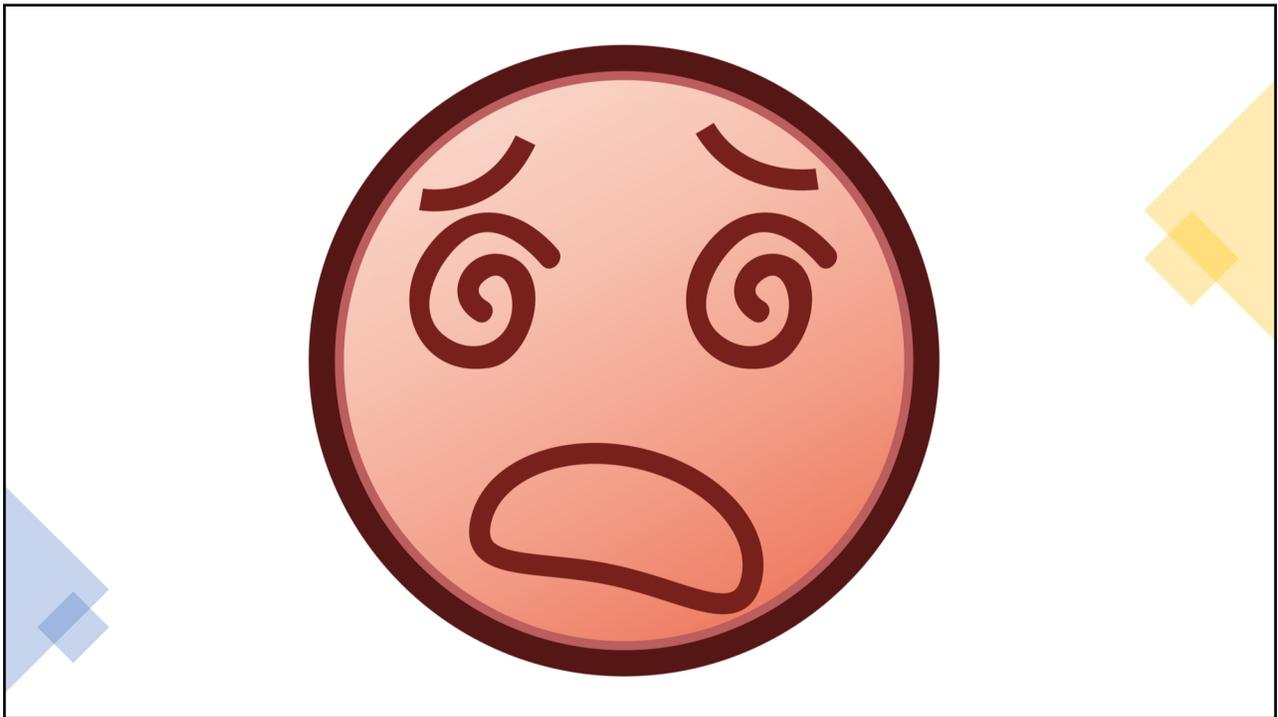
Director of Sound Beginnings at USU
Listening and Spoken Language Specialist
Speech-Language Pathologist
Special Educator

Response to Toxic Stress:
Supporting resilience in young children and their caregivers
to promote long-term health and improved learning outcomes

A yellow toolbox filled with various tools like a hammer, pliers, and a saw, positioned next to a large, glowing heart graphic.A graphic featuring the year '2020' where the '0' is a clock face, set against a dark blue background.









Maslow's Hierarchy of Needs

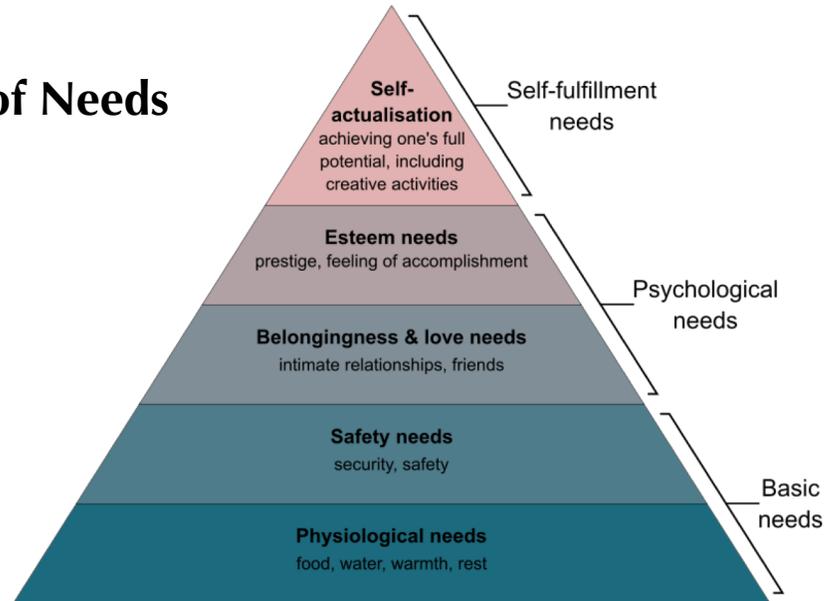
- First 4 Levels: *Deficit Needs*
 - Basic needs or Physiological needs
 - Safety Needs: Security, Order, and Stability
 - Love and Belonging
 - Esteem
- Beyond: *Metamotivation*
 - Cognitive
 - Aesthetic
 - Need for Self-actualization



Abraham Maslow (1908 – 1970)

https://en.wikipedia.org/wiki/Abraham_Maslow

Maslow's Hierarchy of Needs



https://en.wikipedia.org/wiki/Maslow%27s_hierarchy_of_needs

Adverse Childhood Experiences (ACEs): Hurdles to Student Learning *and Long-term Health*

<https://www.cdc.gov/violenceprevention/aces/about.html>

CDC-Kaiser Permanente Study, 1995-1997

- 17,337 participants completed surveys
- Major Findings:
 - ACEs are common across all populations.
 - Almost 2/3 of study participants reported ≥ 1 ACE.
 - More than 1/5 participants reported ≥ 3 ACEs.

Adverse Childhood Experiences (ACEs): Hurdles to Student Learning *and Long-term Health*

<https://www.cdc.gov/violenceprevention/aces/about.html>

CDC-Kaiser Permanente Study, 1995-1997

- 17, 337 participants completed surveys
- Major Findings:
 - Some populations are more vulnerable to experiencing ACEs
 - Social and economic conditions in which they live, learn, work and play.

Adverse Childhood Experiences (ACEs): Hurdles to Student Learning *and Long-term Health*

<https://www.cdc.gov/violenceprevention/aces/about.html>

CDC-Kaiser Permanente Study, 1995-1997

- 17, 337 participants completed surveys
- Major Findings:
 - ACE score: the total sum of the different categories of ACEs reported by participants.
 - Graded dose-response relationship between ACEs and negative health and well-being outcomes.
 - I.e., as the number of ACEs increases so does the risk for negative outcomes.

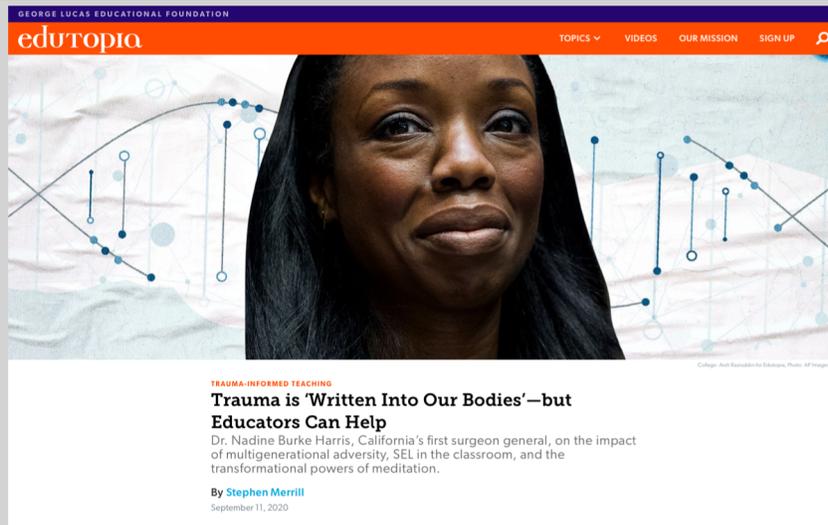
Dr. Nadine Burke Harris, Pediatrician, Surgeon General of CA

- https://www.ted.com/talks/nadine_burke_harris_how_childhood_trauma_affects_health_across_a_lifetime?language=en#t-375119



Dr. Nadine Burke Harris, Pediatrician, California Surgeon General

Screenshot: <https://www.edutopia.org/article/trauma-written-our-bodies-educators-can-help>

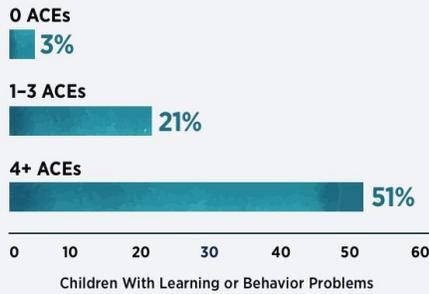


Dr. Nadine Burke Harris, Pediatrician, Surgeon General of CA

Screenshot: <https://www.edutopia.org/article/trauma-written-our-bodies-educators-can-help>, posted September 11, 2020.

The Impact of Trauma on Learning and Behavior

The more adverse childhood experiences (ACEs), the more learning and behavioral problems reported, according to Dr. Nadine Burke Harris.



Source: Burke, Hellman, Scott, Weems, & Carrion, 2011

Last Month's Email Box:

Screenshot: https://developingchild.harvard.edu/resources/connecting-the-brain-to-the-rest-of-the-body-early-childhood-development-and-lifelong-health-are-deeply-intertwined/?utm_source=newsletter&utm_medium=email&utm_campaign=october_2020&fbclid=IwAR17Ga5FX711TsjjiaYlstv8yxHndIT4rLGNUVWk69QsG98DgcDcQJ50

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About Science Innovation & Application Collective Change Resource Library

Reports & Working Papers

Connecting the Brain to the Rest of the Body: Early Childhood Development and Lifelong Health Are Deeply Intertwined

We know that responsive relationships and language-rich experiences for young children help build a strong foundation for later success in school. The rapidly advancing frontiers of 21st-century biological sciences now provide compelling evidence that the foundations of lifelong health are also built early, with increasing evidence of the importance of the prenatal period and first few years after birth.

This Working Paper examines how developing biological systems in the body interact with each other and adapt to the contexts in which a child is developing—for better or for worse—with lifelong consequences for physical and mental health. It explains in clear language how these systems are affected by adversity early in life, and shows how

Launching a New Conversation About Early Childhood Programs and Policies

The extreme challenges of 2020 have

Harvard, Center on the Developing Child: “Health and Learning are Deeply Interconnected in the Body”

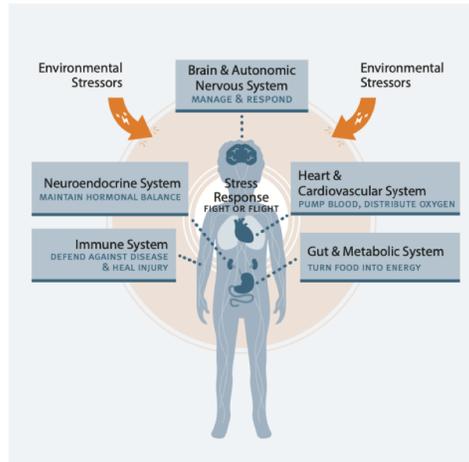
Screenshot: https://46y5eh11fhgw3ve3ytpwxt9r-wpengine.netdna-ssl.com/wp-content/uploads/2020/10/2020-10_-WP15MiniBrief_FINAL.pdf

1

The brain and all other systems in the body interact with each other as they adapt to the environment.

The conditions we create and the experiences we provide for young children affect not just the developing brain, but also other systems in the body, including immune responses and metabolic regulation. Working like a team of skilled athletes, these systems rely on and react to information from the environment and from each other. Together, they perform the functions that are essential for lifelong well-being.

IMPLICATIONS: Because all biological systems in the body are connected, supporting families with young children and strengthening responsive relationships not only build a foundation for social-emotional development, school readiness, and future learning; they also strengthen the building blocks for a lifetime of physical and mental health.



Harvard, Center on the Developing Child: “Health and Learning are Deeply Interconnected in the Body”

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2

Experiences during the prenatal period and first 2-3 years after birth affect lifelong health at least as much as they affect school achievement.



Developmental timing is critical. Science tells us that experiences and exposures during pregnancy and the first few years after birth affect developing biological systems in many ways that are difficult to change later. For example, if a woman experiences excessive stress, poor nutrition, or toxic environmental exposures during pregnancy, it can affect how organs, stress response, and metabolic systems develop, with long-lasting impacts into adulthood, such as increased risk for heart disease, obesity, diabetes, and mental health conditions.

IMPLICATIONS: Policies and programs that reduce stress, prevent toxic exposures, and provide support for pregnant mothers and families with infants and toddlers will result in better health outcomes across the lifespan and save billions in health care costs. Taken another way, if we delay early investments until later in the preschool period, we will miss a critical opportunity to build a stronger foundation for a healthier and more productive adult population.

Harvard, Center on the Developing Child: “Health and Learning are Deeply Interconnected in the Body”

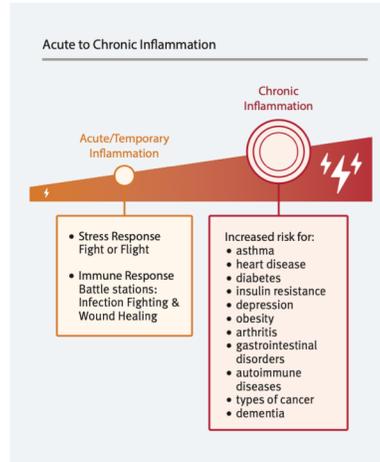
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3

Inflammation, as part of the body's stress response, helps defend against infection, injury, and acute threat—but persistent inflammation in response to chronic adversity can have long-term, disruptive effects on physical and mental well-being.

Experiencing persistently adverse environments very early in childhood may produce chronic inflammatory conditions that can last for a lifetime, including including heart disease, diabetes, depression, arthritis, gastrointestinal disorders, autoimmune diseases, multiple types of cancer, and dementia, among many others.

IMPLICATIONS: *If policies and services can reduce sources of ongoing, excessive stress for young children and their families—such as poverty, racism, violence, housing instability, and food insecurity—we can dramatically reduce the need for costly treatments for a wide range of health conditions. Heart disease, diabetes, and depression alone cost the U.S. more than \$600 billion each year and are three of the conditions most likely to be linked to early adversity.*

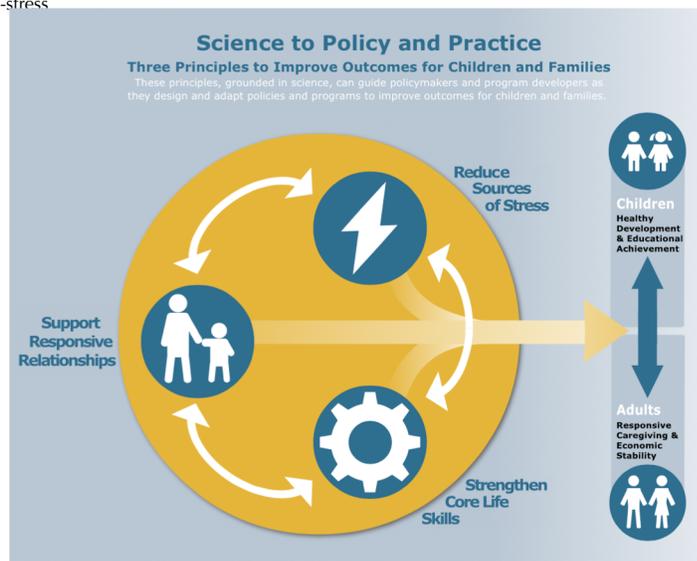


2 developingchild.harvard.edu

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Harvard, Center on the Developing Child: “Health and Learning are Deeply Interconnected in the Body”

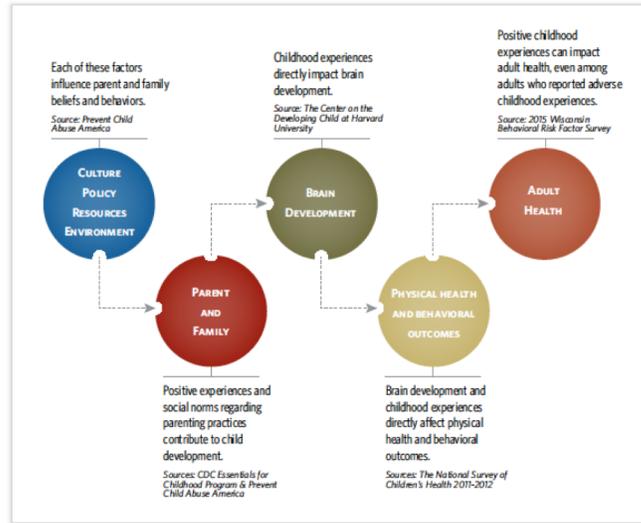
Screenshot: <https://developingchild.harvard.edu/resources/three-early-childhood-development-principles-improve-child-family-outcomes/#reduce-stress>



Alliance for Strong Families and Communities: “Balancing Adverse Childhood Experiences (ACEs) With HOPE”

Screenshot: https://www.alliance1.org/web/resources/pubs/balancing-adverse-childhood-experiences-aces-hope.aspx?gclid=Cj0KCQjwuL_8BRCXARIsAGiC51BfCKltqp22AeKE6ylsGkWkollcaQwICEn9X5eitMvHBpQUXFRzfi0aAij_EALw_wcB

FIGURE 1. BALANCING ACEs WITH HOPE LOGIC MODEL



Alliance for Strong Families and Communities: “Balancing Adverse Childhood Experiences (ACEs) With HOPE”

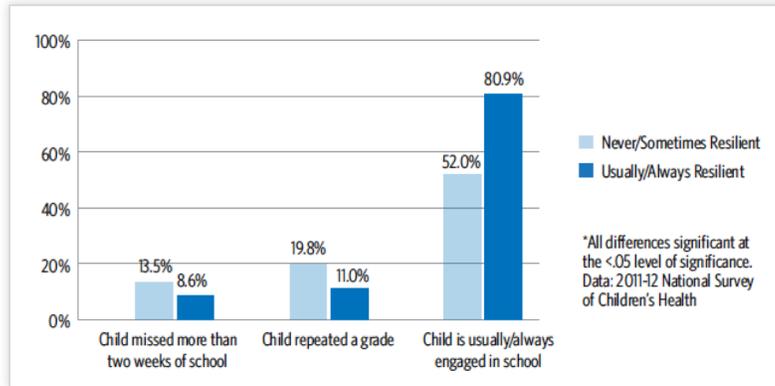
https://www.alliance1.org/web/resources/pubs/balancing-adverse-childhood-experiences-aces-hope.aspx?gclid=Cj0KCQjwuL_8BRCXARIsAGiC51BfCKltqp22AeKE6ylsGkWkollcaQwICEn9X5eitMvHBpQUXFRzfi0aAij_EALw_wcB

- Impact of Positive parental relationships & experiences on childhood resilience:
 - Parents discussed things that mattered with their children.
 - Parents participated in child's activities & knew child's friends
 - Parents managed their own parenting stress.
- Summary
 - “...protective factors related to children's relationships and experiences with their parents and communities are strongly associated with resilience in children; resilient children – even those who have suffered four or more adverse experiences – have better functional (school) and health outcomes.”
 - “These negative effects (emotional, mental, and behavioral) hold up across all income and race/ethnicity groups: At the same time, positive relationships and environment buffer the impact of ACEs across all levels of household income.”

Alliance for Strong Families and Communities: “Balancing Adverse Childhood Experiences (ACEs) With HOPE”

https://www.alliance1.org/web/resources/pubs/balancing-adverse-childhood-experiences-aces-hope.aspx?gclid=Cj0KCQjwuL_8BRCXARIsAGiC51BfCKltqp22AeKE6yIsGkWkollcaQwICEn9X5eitMvHBpQUXFRzfi0aAij_EALw_wcB

FIGURE 2. PREVALENCE OF SCHOOL SUCCESS FACTORS AMONG CHILDREN WITH SPECIAL HEALTH CARE NEEDS WHO HAD TWO OR MORE ADVERSE CHILDHOOD EXPERIENCES (ACEs) AND WHETHER CHILD DEMONSTRATES RESILIENCE

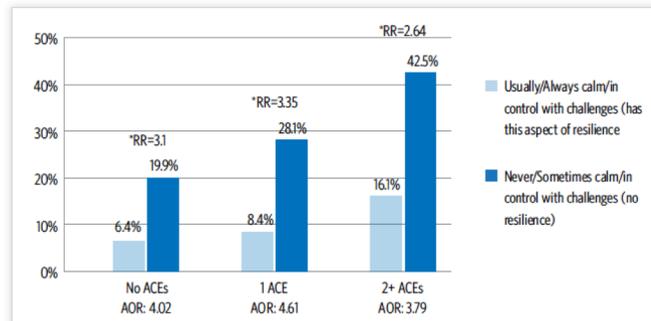


Source: Bethell, C. D., Newacheck, P., Hawes, E., & Halfon N. (2014). Adverse childhood experiences: Assessing the impact on health and school engagement, and the mitigating role of resilience. *Health Affairs*, 33(12), 2106-2115. DOI: 10.1377/hlthaff.2014.09. Reprinted with permission.

Alliance for Strong Families and Communities: “Balancing Adverse Childhood Experiences (ACEs) With HOPE”

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FIGURE 3. PREVALENCE OF EMOTIONAL, MENTAL, OR BEHAVIORAL CONDITIONS BY ADVERSE CHILDHOOD EXPERIENCE (ACE) EXPOSURE AND RESILIENCE STATUS

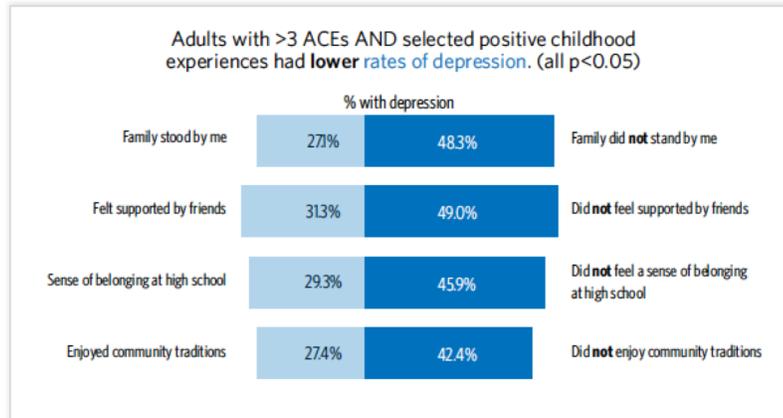


Source: Bethell, C., Gombojav, N., Solloway M., & Wissow, L. (2015). Adverse Childhood Experiences, resilience, and mindfulness-based approaches: Common denominator issues for children with emotional, mental, or behavioral problems. *Child & Adolescent Psychiatric Clinics of North America*.doi:10.1016/j.jchc.2015.12.001. Reprinted with permission.

Alliance for Strong Families and Communities: “Balancing Adverse Childhood Experiences (ACEs) With HOPE”

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FIGURE 4. FACTORS THAT MODERATE THE EFFECTS OF MORE THAN 3 ACEs ON ADULT DEPRESSION



Source: Jones, J., Bethell, C.D., Linkenbach, J. & Sege, R. (2017). Health effects of ACEs mitigated by positive childhood experiences. (manuscript in preparation).¹⁴

Alliance for Strong Families and Communities: “Balancing Adverse Childhood Experiences (ACEs) With HOPE”

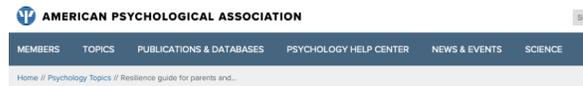
Screenshot: https://www.alliance1.org/web/resources/pubs/balancing-adverse-childhood-experiences-aces-hope.aspx?gclid=Cj0KCQjwuL_8BRCXARIsAGiC51BfCKltqp22AeKE6ylsGkWkollcaQwlcEn9X5eitMvHBpQUXFRzfi0aAij_EALw_wcB

Positive Parenting Practices:

- Catch the child being good.
- Respond to child’s crying.
- Play or read to child.
- Seek support with parenting.
- Support the child’s language development.
 - “Give child words.”
- Seldom/never spank.
- Seldom/never fight in front of child.

American Psychological Association: “Resilience Guide for Parents and Teachers”

<https://www.apa.org/topics/resilience-guide-parents>



Resilience guide for parents and teachers

Children's problems include adapting to a new classroom, bullying by classmates. Resilience is the ability to thrive despite these challenges.

Last updated: August 26, 2020 Date created: January 24, 2012 10 min read



American Psychological Association: “Resilience Guide for Parents and Teachers”

<https://www.apa.org/topics/resilience-guide-parents>

10 Tips for Building Resilience in Children and Teens

1. Help the child to connect with peers.
 - Empathy, listening to others
2. Engage child in service/helping others.
3. Keep a daily routine.
4. Build unstructured time during school day for the child to explore creativity.
5. Teach the child self-care skills
 - nutrition, exercise, adequate sleep

American Psychological Association:
“Resilience Guide for Parents and Teachers”

<https://www.apa.org/topics/resilience-guide-parents>

10 Tips for Building Resilience in Children and Teens

6. Help child to set attainable goals.
 - Support progress toward goals.
7. Help child nurture a positive self-view.
 - Help child recall past successes over challenges.
8. Help child maintain a long-term perspective in times of challenge.
9. Help child recognize how they have learned/developed in times of challenge.
10. Help the child accept change.

American Psychological Association:
“Resilience Guide for Parents and Teachers”

<https://www.apa.org/topics/resilience-guide-parents>

Building Resilience in Preschool Children

- Watch for signs of fear, sadness
 - clingy, regressive behaviors, irritable
- Use play/art/games to help them express their feelings
- Use family time to support closeness
 - Increase family time in times of stress/change
 - E.g., read, play games, holding child close

American Psychological Association:
“Resilience Guide for Parents and Teachers”

<https://www.apa.org/topics/resilience-guide-parents>

Building Resilience in Elementary School Children

- Ensure child has a “safe place”.
- Talk with child honestly and with reassurance of action plans to keep them safe.
- Listen to child’s concerns/fears.
- Limit exposure to news media that is frightening.
 - Check their understanding of what they view/overhear.
- Be aware of impact of compounded stressors on child’s capacity.
 - Respond with reassurance

American Psychological Association:
“Resilience Guide for Parents and Teachers”

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Building Resilience in Middle School Children

- Children look to teachers, peers, parents for safe support.
- Reinforce empathy.
- Help frame perspective, esp during shifting social groups.
- Adults can provide models of self talk to negotiate feelings during extraordinary stress.
 - Share coping strategies with child.
 - Realize that child may need different strategies.

American Psychological Association:
“Resilience Guide for Parents and Teachers”

<https://www.apa.org/topics/resilience-guide-parents>

Building Resilience in High Schoolers

- Teens can feel fear/uncertainly keenly.
 - Typical teen stressors
 - World events
 - Take news breaks, when needed.
- Emotions may be volatile.
- Connections may be difficult.
- Talk with teens, even then they appear uninterested in talking.
- Answer teen’s questions honestly, with reassurance.
 - Ask their opinion and LISTEN.

American Psychological Association:
“Resilience Guide for Parents and Teachers”

<https://www.apa.org/topics/resilience-guide-parents>

Building Resilience in High Schoolers

- Help teen create their own safe place.
- May prefer time with peers.
- Support with family time.
- Encourage journal writing or art to express emotions.
- Be understanding of fluctuating emotions (due to hormonal levels) yet firm with angry or sullen behavior.
- Reassure teen of your support and of their capability.

American Psychological Association: "Resilience Building Plan Worksheet"

Screenshot:

https://www.acponline.org/system/files/documents/about_acp/chapters/or/resilience_building_plan_worksheet.pdf

Sylvia Fy, Ph.D., Associate Professor, Department of Psychiatry
Associate Director, OHSU Resident and Faculty Wellness Program and OHSU Peer Support efy@ohsu.edu

Resilience Building Plan Worksheet

Create a plan for yourself and practice these skills. Be open to not doing all of them perfectly and curious about what you are going to learn about yourself and others in the process.

- Recognize Your Signs of Stress**
 - Where you feel in your body?
 - What is your "bad habit" when stressed?
- Build Physical Hardiness**
 - Make small changes to improve health (better sleep, nutrition, hydration, exercise) and be accountable to someone
 - One change I would like to make: _____ Who I'll tell about it: _____
- Strengthen Relaxation Response—"calm body/quiet mind"**
 - Activities at home that help me relax:
 - Activities at work that help me relax:
 - Try out relaxation strategies and ways to be more present:
 - mindfulness meditation (see apps like www.calm.com, www.headspace.com)
 - self-soothe by doing something comforting related to 1 of the 5 senses
 - Tactile (hold something soft/comforting/grounding)
 - Smell (lavender, fresh air)
 - Visual (puppy photos, look out window at trees)
 - Auditory (music, sounds of nature)
 - Taste (tea, chocolate)
- Use Your Strengths** Describe a time that you were able to overcome or handle a major challenge in your life.
 - What did you learn about yourself?
 - What personal strength(s) did you draw upon?
 - Draw an image of when you are your most resilient
 - How might you apply this strength now?
- Increase Positive Emotions on Daily Basis**
 - Sources of joy, humor
 - Gratitude visit or letter
 - Accomplishments
- Engage in Meaningful Activities**
 - Notice regularly what happened in your day that was meaningful
What are those activities/moments?
 - Activities associated with "flow"
- Counter Unhelpful Thinking**
 - Write down what you are thinking about when stressed and then ask: What is the worst that could happen AND could I survive it? Best that could happen? Most likely? What would I tell a friend in similar situation?
 - If you can't stop thinking about a situation, write about it a couple of times over 4 weeks (for about 15 minutes each time) and see how your story changes/becomes clearer.
 - If you are being hard on yourself, practice self-compassion (see www.selfcompassiononline.com)
 - Remember what a hero/coach/mentor said to you that encouraged you especially when you are doubting yourself (post it somewhere)
- Create a Caring Community**
 - Connect daily
 - Identify Your Sources of Support
 - Work: _____
 - Community: _____
 - Practice good communication/conflict resolution skills (*Difficult Conversations*)

Selected Self-Help Resources

Bickel, J. Not too late to reinvent: How midcareer faculty can keep growing. *Academic Medicine*. 2016/10/11. Published online.

Burnett, B. & Evans, N. (2015). *Designing Your Life: How to Build a Well-Lived, Joyful Life*. New York: Alfred Knopf.

Germer, C. (2009). *The Mindful Path to Self-Compassion: Freeing Yourself from Destructive Thoughts*. New York: Guilford Press.

Reivich, K. & Shatte, A. (2003). *The Resilience Factor: 7 Keys to Finding Your Inner Strength and Overcoming Life's Hurdles*. New York: Broadway Books.

Stone, D. Patton, R., Heen, S., & Fisher, R. (2010). *Difficult Conversations*. New York: Penguin Books.

Supporting Parents Supporting Children Vroom: Everyone has what it takes to be a Brain Builder!

<https://www.youtube.com/watch?v=PB1Uo9nbIVU&t=3s>



Thank you

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